

[THREE-DIMENSIONAL OUTPUT SYSTEM]

Abstract of Disclosure

The three-dimensional graphical rendering of a live broadcast signal onto an output device such as a television or a monitor is described herein. The three-dimensional graphical rendering is performed by a set-top box or other device that has a graphics processor. In operation, a live broadcast signal is provided as input to the set-top box or other graphical rendering device. The signal initially is in the form of uncompressed video data from a video decoder or other YUV video source. The signal can be for use with a conventional television system, a high definition television system (HDTV), a computer system with a monitor, or any other applicable output device. The uncompressed video data is mapped to a texture memory in the graphics processor. The video data is then rendered to a three-dimensional surface and displayed on an output device, for example a television screen. In one aspect of the invention, the output device provides a three-dimensional user interface that displays menus, program guides, allows users to change channels, displays video, pauses and rewinds live television, and otherwise provides all of the elements typically found on modern interface screens.

Figures